

A Descriptive Study to Assess the Knowledge of Health Care Workers Regarding Chemotherapy, Its Side Effects and Management

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ABSTRACT

Introduction: Cancer is the uncontrolled growth of abnormal cells in the body which develops when the body's normal mechanism stop working. Chemotherapeutic drugs are agents of choice with powerful chemical to kill the abnormal proliferative growth of abnormal cells in human body. Chemotherapeutic administration is a sensitive domain in nursing, where little negligence may leads to adverse consequences for patients and health care workers. So assessment of knowledge is crucial to lay down some strategies to tackle these side effects efficiently to achieve optimum level of health with disabilities.

Material and methods: A quantitative approach with descriptive research design was adopted for 50 study subjects in Guru Gobind Singh Medical Hospital, Faridkot by purposive sampling techniques. A self-structured knowledge questionnaire was selected to assess the knowledge of study subjects.

Results: The study result revealed that 54% (27) health care workers had good knowledge and 46% (23) health care workers had average knowledge regarding chemotherapy, its side effects and management. Results shown that statically non-significant association with socio demographic variables.

KEYWORDS: Cancer, Chemotherapy, Side effects, Management

INTRODUCTION

Cancer is an abnormal growth of cells which has ability to involve adjacent tissues and even distant organs and eventual death of affected patient. Cancer can involve any tissues of the body and have many different forms in each body area. Cancer cells do not know "what to do, and when to do" which leads to devastating effects on patients life. According to WHO, cancer is the second leading cause of fatality bas 10 million new cases are diagnosed each year.¹

There are many types of cancer treatment like surgery chemotherapy, Radiation, Hormonal therapy and targeted therapy (immunotherapy). The types of treatment that patient receive will depend on the types of cancer, stage and how advance it is.²

Chemotherapy is one of most common treatment for cancer. It uses certain drugs to kill cancer cells to stop them from growing and spreading to the other parts of body. Chemotherapeutic drugs interfere with the

normal metabolism of cells which makes them stop growing.⁴ The drugs are called cytotoxics. Chemotherapy affects all the cells that grow and divide quickly in the body. This includes cancer cells and normal cells, these cause side effects, most side-effects are short term and can be managed easily but long term effects do not go away. These may include damage to your heart, lungs, nerve endings, or reproductive organs. Management of these effects depends upon the severity.⁵

Health care workers are mainly responsible for sum up the entire procedure of chemotherapy, preparation, handling and administration, so there is essential requirement to assess the knowledge of health care workers to ensure the patients safety and their own occupational health issue safety.⁶ Nursing management of patient receiving chemotherapy requires knowledge about the treatment, skills in

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assessment, technical expertise, ability and reward in meeting this is to be able to provide the care desired to support the client physically and emotionally. Nursing care begins with a thorough understanding of the patient condition, goal of therapy, drug, dose, route, administration principles and potential side effects.

MATERIAL AND METHODS

Design

A Quantitative research approach with descriptive design was used to conduct to assess the knowledge of health care workers regarding, chemotherapy, its side effects and management in Guru Gobind Singh Medical Hospital, Faridkot, Punjab.

Sample

Purposive sampling technique was used to select 50 health care workers. Data was collected by using self-structured knowledge questionnaire on chemotherapy, its side effects and its management.

Inclusion criteria include health care workers who were present at the time of data collection and willing to participate.

Exclusion criteria include health care workers who were not present at the time of data collection.

INSTRUMENTATION

Development of questionnaire tool-the self-structured knowledge questionnaire was constructed to assess the knowledge regarding chemotherapy, its side effects and their management.

PART A- This part consists of socio-demographic variables: Age, Gender, Professional Status, Residence, Family Type, and Training Programme.

PART B- Self- structured Questionnaire to assess knowledge of health care workers regarding side effects and management of chemotherapy.

The study was conducted at Guru Gobind Singh Medical Hospital, Faridkot.

Table 1: Distribution of Questions

Sr. No.	Items	No. of Questions	Questions
1.	Questions related to chemotherapy	10	1-10
2.	Questions related to chemotherapy side effect	10	11-20
3.	Questions related to chemotherapy side effect management	10	21-30

CRITERIAN MEASURE

Data was collected by self-structured knowledge questionnaire to assess the knowledge of health care workers. Total 30 items were included. Correct answer awarded with 1 mark and 0 for incorrect.

ETHICAL CONSIDERATION

Written permission was obtained from the principal and research committee of the university college of nursing, Faridkot, Punjab and head of department of oncology unit of Guru Gobind Singh Medical hospital, Faridkot. Informed written consent was obtained for each study subject for participation in study.

Data was analyzed by using both inferential and descriptive statistics frequency and percentage, mean and standard deviation, chi- square.

RESULTS

The socio demographic profile of 50 health care workers who were enrolled in study is summarized in table number 1 below. The data was described with the help of percentage.

Table-2: Frequency and percentage distribution of health care workers according to their socio-demographic variable.

N=50

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	AGE (in years)		
	19-28	40	80%
	29-38	10	20%
2	GENDER		
	MALE	01	2%
	FEMALE	49	98%
3	EDUCATIONAL STATUS		
	GNM	03	06%
	B.Sc.(N)	45	90%
	P.B.B.Sc.(N)	00	00%
	M.Sc.(N)	02	04%

4	RESIDENCY URBAN RURAL	30 20	60% 40%
5	PRESENT DESIGNATION WARD INCHARGE STAFF NURSE B.Sc. STUDENT INTERN	00 10 40	00% 20% 80%
6	FAMILY TYPE NUCLER JOINT	32 18	64% 36%
7	TRAINING PROGRAMME YES NO	08 42	16% 84%

It shows that majority of study subjects (80%) were in age group of 19-28, and 98% were females, maximum (90%) were graduate, (60%) had urban residence. Most of (84%) did not attend any training programme.

Table -3: Frequency and percentage distribution of knowledge scores of health care workers.

N=50

Level of knowledge	Criteria measure	Frequency	Percentage
Good	21-30	27	00%
Average	11-20	23	46%
Poor	1-10	00	54%

Study findings depicted that 46% of health care workers having average knowledge and 54% health care workers were fall under good knowledge scores regarding chemotherapy, its side effects and management.

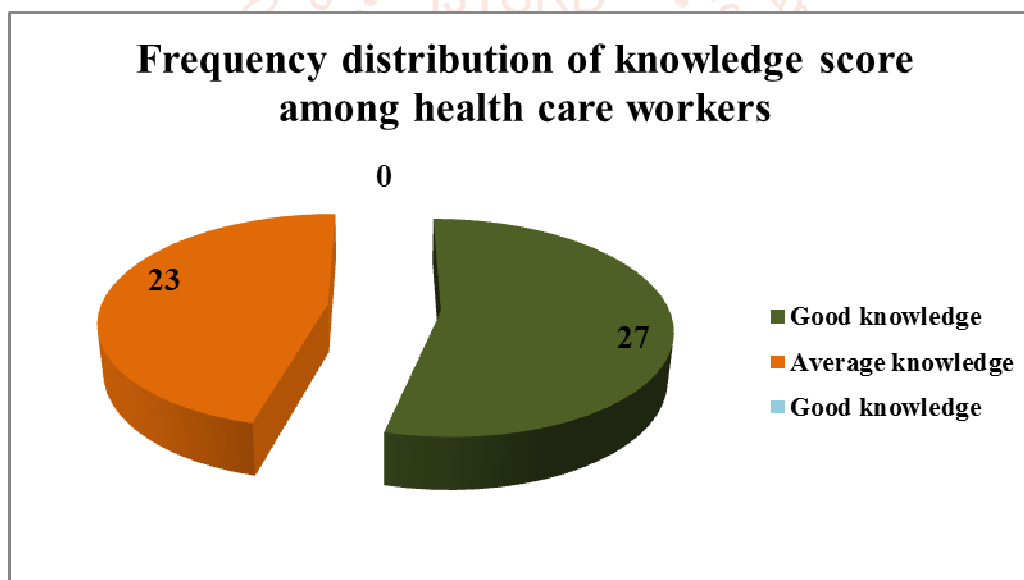


Figure 1: Frequency distribution of knowledge scores among health care workers regarding chemotherapy, its side effects and management.

Table4: Knowledge regarding chemotherapy, its effects and management among health care workers (N=50)

Knowledge items	Maximum possible score	Maximum Obtained score	Minimum Obtained score	Mean	S.D
30 items	30	27	15	20.98	2.758

Study findings shown that, total mean knowledge score of study subjects was 20.98 and Standard deviation is 2.758.

Which proved the hypothesis that, health care workers will be having good knowledge regarding chemotherapy, its effects and management. Null hypothesis (H_0) that, health care workers will be not be having good knowledge regarding chemotherapy, its effects and management was therefore rejected.

The association between knowledge score and their socio demographic variables shown that, health care workers who were female had good knowledge regarding chemotherapy, its effects and management. Statistical significance was calculated with chi square test.

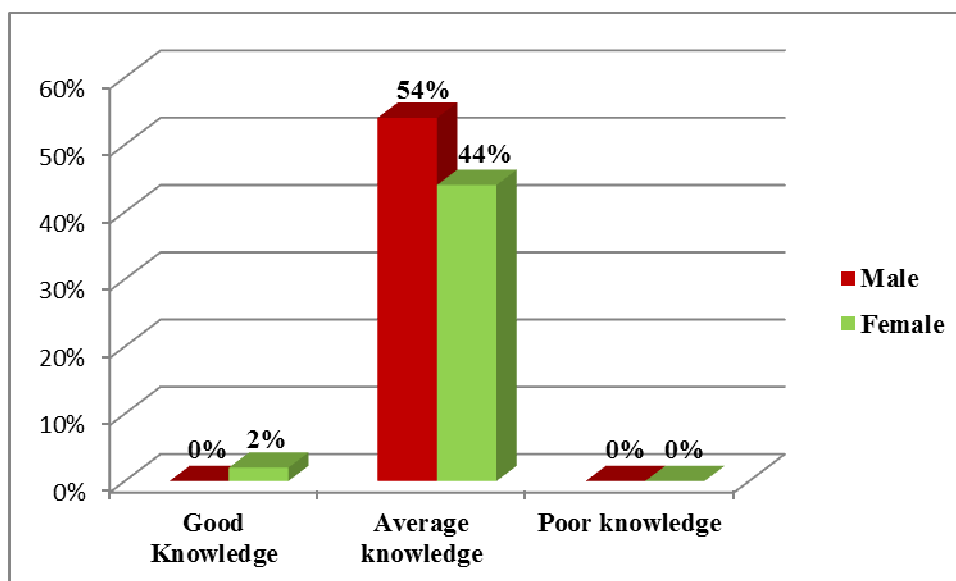


Figure 2: Association between knowledge score with Gender

DISCUSSION

Findings of present study revealed that, maximum of study subjects (54%) had good knowledge, 46% had average knowledge and 00% had poor knowledge regarding chemotherapy, its side effects and management.

It was supported by study conducted by **Jyanthi. V.**, which showed 71% nursing students having good knowledge, 21% had average and 08% had poor knowledge scores.³

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